Overview

HP Insight Recovery, an optional extension of HP Insight Dynamics - VSE suite for ProLiant, provides for automated disaster recovery of logical server environments. Logical servers are server profiles, which are easily created and freely moved. They can be managed in the same way, whether they are deployed as physical servers or virtual machines. With a simple mouse click, HP Insight Recovery transfers application environments, running on HP BladeSystem or in VMware virtual machines, to a recovery site, located away from the original site impacted by a disaster situation. HP Insight Recovery utilizes the Continuous Access capabilities of HP storage environments to ensure that application data is properly transitioned to the recovery location, and that the overall transition is measured in minutes, not days.

HP Insight Recovery provides disaster recovery protection for logical servers configured and managed by Insight Dynamics-VSE (ID-VSE). Logical servers that are managed by HP Insight Recovery are referred to as Disaster Recovery Protected (DR Protected) logical servers. Each DR Protected logical server is configured to run on an HP ProLiant Server; either a C-class Blade equipped with HP Virtual Connect, or on a virtual machine under the control of a VMware ESX Server. An HP Insight Recovery configuration consists of two sites, each running ID-VSE and HP Insight Recovery. At any point in time, one site is configured with the primary role and the other is configured with the recovery role. The primary site volumes are replicated on an HP StorageWorks EVA array at the recovery site. The primary and recovery site arrays are synchronized with Continuous Access EVA. Each replicated recovery site volume is associated with a DR Protected logical server at the Recovery site.

Licensing for HP Insight Recovery is done on a per-server basis, where both the primary and recovery servers (which make up the protected "pairs") must each have HP Insight Recovery license applied. Licenses for HP Insight Recovery are managed separately by the local Central Management Server on both the primary and recovery sites, and as such licenses must be obtained uniquely for each location. Prerequisite products are HP Insight Dynamics - VSE for each protected server, as well as the HP Continuous Access EVA software within the EVA storage array environment.

HP Insight Dynamics - VSE with the Insight Recovery option makes HP BladeSystem Matrix disaster recovery-ready, by pre enabling disaster recovery protection for both physical and virtual logical servers. HP Insight Dynamics - VSE provides the advanced management and automated provisioning capabilities at the core of the Matrix Orchestration Environment for HP BladeSystem Matrix (www.hp.com/go/matrix). HP BladeSytem Matrix is a fully integrated cloud infrastructure in a box that helps you accelerate business service delivery without chaos, and take costs out today and keep them out in the future.
NOTE: HP Insight Recovery is considered to be "customer installable/configurable", so although HP recommends the purchasing of the HP Insight Recovery Installation & Startup Service, the customer is not required to do so. HP Insight Recovery does have a prerequisite of HP Insight Dynamics - VSE suite for HP ProLiant which is not considered to be "customer installable/configurable". Installation and Start-up services for HP Insight Dynamics - VSE are required for each HP SIM Central Management Server (CMS) where HP Insight Dynamics - VSE and HP Insight Recovery will be deployed. Installation and Start-up Services are offered by, and need to be performed by, HP Services and Authorized Business Partners. After the HP SIM CMS is fully installed and operational with HP Insight Dynamics - VSE and HP Insight Recovery, customers may purchase and add-on more Insight Dynamics - VSE and/or Insight Recovery licenses to meet future business requirements.

Overview

Models

Licenses and Media	HP Insight Recovery Software, 1-Server License including 24 x 7 Support NOTE: This license supports HP ProLiant ML/DL servers and c-Class blade servers. Customer will receive a printed license entitlement certificate via physical shipment.	512451-B21
	HP Insight Recovery Software, Flexible-Quantity License including 24 x 7 Support NOTE: This license supports HP ProLiant ML/DL servers and c-Class blade servers NOTE: This license can be used to purchase multiple licenses with a single activation key. Customer will receive a printed license certificate via physical shipment.	512453-B21
	HP Insight Recovery Software, Tracking License including 24 x 7 Support NOTE: This license supports HP ProLiant ML/DL servers and c-Class blade servers NOTE: This license can be used to purchase multiple licenses with a single activation key. Customer will receive a printed license certificate via physical shipment.	512454-B21
	HP Insight Recovery Software License including 24 x 7 Support, Electronic NOTE: This license supports HP ProLiant ML/DL servers and c-Class blade servers. Customer will receive via email a receipt and link to a license entitlement certificate. NOTE: Electronic LTUs are only available through limited points of sales; if not available, order a license with a printed entitlement (512451-B21) instead.	TA849AAE
	HP Insight Recovery Software 8-server FIO License including 24 x 7 Support NOTE: This license supports HP ProLiant c-Class blade servers. NOTE: Must be purchased as an option to an HP BladeSystem enclosure. Customer will receive a printed license entitlement certificate via physical shipment.	517417-B21
	HP Insight Recovery Software 16-server FIO License including 24 x 7 Support NOTE: This license supports HP ProLiant c-Class blade servers. NOTE: Must be purchased as an option to an HP BladeSystem enclosure. Customer will receive a printed license entitlement certificate via physical shipment.	517421-B21
	HP Insight Software Media Kit NOTE: The Insight Software version v3.00 or higher media kit includes the HP Insight Dynamics - VSE Suite, HP Insight Recovery, HP Insight Orchestration, HP Virtual Connect Enterprise Manager, HP Insight Control and HP Systems Insight Manager. The Insight Software can also be downloaded from the web at: http://h18013.www1.hp.com/products/servers/management/fpdownload.html NOTE: The Insight Software DVD Media Kit comes without licenses. It contains HP Systems Insight Manager and Insight software products and components licensed separately by Insight software suites and optional components. It uses an integrated installer to perform quick and accurate software installation and updates. NOTE: For each purchased license, a license entitlement certificate will be delivered. The license entitlement certificate contains information needed to register and redeem license activation key(s) online or via fax. For more information, please visit: http://www.hp.com/go/ICE-license	436222-B21

Standard Features

Licensing and Packaging

NOTE: HP Insight Recovery is licensed per server. One server license is required for every managed server, one on the primary site, and one on the recovery site. Licenses are non-transferable. Full details are contained in the End User License Agreement.

For each purchased license, a license entitlement certificate will be delivered. The license entitlement certificate contains information needed to redeem license activation key(s) online or via fax. For more information, please visit: http://www.hp.com/go/ICE-license.

HP Insight Recovery is provided via DVD media included on the Insight Software Media Kit, and can also be downloaded from: http://h18013.www1.hp.com/products/servers/management/fpdownload.html

NOTE: For more information regarding HP Insight Recovery visit: www.hp.com/go/insightdynamics

HP Insight Recovery Benefits

HP Insight Recovery provides the following key benefits:

- Provide an integrated Disaster Recovery solution for Insight Dynamics - VSE. Utilizing the logical server and associated management capabilities of Insight Dynamics - VSE, HP Insight Recovery provides an integrated disaster recovery solution for key applications within a flexible environment
- Easily incorporate DR into your existing enterprise environment. Since HP Insight Recovery utilizes the capabilities already existing within HP Insight Dynamics - VSE, incorporating DR within your existing environment is simple and fully integrated.
- Offers a cost-effective metro-distance recovery solution, without the requirement of integration with a traditional "clustering" environment. Applications within an HP Insight Recovery protected environment do not need to be "cluster aware", since the DR failover is handled at the logical server level - for both physical and virtual environments - rather than at the application level. This means that any application within a logical server can take advantage of HP Insight Recovery's benefits within an HP Insight Dynamics - VSE environment.
- Quickly failover to a remote location with the push of a single button. Once configured with the easy-to-use Graphical User Interface, recovery of a primary site environment is activated from the recovery site with a simple "push button" approach. These result in fast and reliable DR activation, and quickly recovered application environments at the recovery site.
- Seamlessly integrates into existing EVA-based storage environments. Because HP Insight Recovery relies upon the standard HP EVA Continuous Access data replication product, connecting to the replicated data at the recovery site is fast and reliable.

Standard Features

Key Product Features

Provides disaster recovery with the "push of a button"

- Integrated design with HP Insight Dynamics - VSE utilizes logical servers for coordinating local and recovery server profiles
- Simple GUI-based configuration tools allows easy creation of recovery profile based on primary profile information
- Coordination of system resources along with storage resources insures coordinated recovery actions
- Recovery initiated at remote location with a single action, resulting in remote location becoming fully active
- Site "role-reversal" allows for the recovery site to now become the primary site, and allows the ability to set up failover scenarios back to the original site.

Protects both Physical and Virtual server environments

- Using Insight Dynamics - VSE's logical server capabilities, Insight Recovery can recover both blade server environments as well as virtual environments enabled by key virtualization technologies
- Supported virtual environment: VMware ESX.
- Supported HP blade server environment: HP BladeSystem with ProLiant blades, Virtual Connect and Virtual Connect Enterprise Manager.
- Supports up to 50 protected logical server environments to allow for RTO (Recovery Time Objective) timeframes of less than 5 hours (for the entire protected environment).

Utilizes established data replication technologies for metropolitan-distance recovery

- Integrates with and utilizes established data replication technologies to ensure remote failover of application and system data while minimizing any data loss
- Supports HP StorageWorks EVA Continuous Access replication (in synchronous mode) on the HP StorageWorks EVA 4000/4100/4400, EVA 6000/6100/6400, and EVA 8000/8100/8400 storage arrays.
- Allows for storage recovery across campus and metropolitan distance environments (typically 75Km or less).

Warranty	HP will replace defective delivery media replacement for a period of 90 days following the date of purchase.

Software Support

HP offers a number of software support services, many of which are provided to customers at no additional charge.

Software Technical Support and Update Service

The HP Insight Recovery includes one year of 24 x 7 HP Software Technical Support and Update Service. This service provides access to HP technical resources for assistance in resolving software implementation or operations problems. The service also provides access to software updates and reference manuals either in electronic form or on physical media as they are made available from HP. (Customers who purchase an electronic license to use are eligible for electronic updates only.) With this service, HP Insight Recovery customers will benefit from expedited problem resolution as well as proactive notification and delivery of software updates. For more information about this service, see: http://www.hp.com/services/insight.

Installation & Startup Service

NOTE: HP Insight Recovery is considered to be "customer installable/configurable", so although HP recommends the purchasing of the HP Insight Recovery Installation & Startup Service, the customer is not required to do so. HP Insight Recovery does have a prerequisite of HP Insight Dynamics - VSE Suite for HP ProLiant which is not considered to be "customer installable/configurable". Installation and Start-up services for HP Insight Dynamics - VSE are required for each HP SIM Central Management Server (CMS) where HP Insight Dynamics - VSE and HP Insight Recovery will be deployed. Installation and Start-up Services are offered by, and need to be performed by, HP Services and Authorized Business Partners. After the HP SIM CMS is fully installed and operational with HP Insight Dynamics - VSE and HP Insight Recovery, customers may purchase and add-on more Insight Dynamics - VSE and/or Insight Recovery licenses to meet future business requirements.

HP Insight Recovery does not require installation and startup services. Optional Installation and startup services are available for each HP SIM CMS where HP Insight Recovery will be deployed.

NOTE: Installation and Startup service for HP Insight Dynamics - VSE is a mandatory pre-requisite of HP Insight Recovery.

Online Support Resources

HP Remote Support Pack incorporates industry-leading service tools that notify you when a significant system even has occurred or may potentially occur. You can configure and customize alert notification status for key hardware components including HP ProLiant servers. Integration of the HP Remote Support Pack with HP SIM brings you a comprehensive "phone home to HP" capability. For more information, please visit: http://www.hp.com/services/remotesupportpack.

Registration for Software Technical Support and Update Service

If the license information you received for your product instructs you to register for Software Technical Support and Update Service, please follow the instructions so that you will be eligible for telephone support and product updates.

How to Use Your Software Technical Support and Update Service

Once registered, you will receive a service contract in the mail containing the Customer Service phone number and your Service Agreement Identifier (SAID). You will need your SAID, when calling for technical support. Using your SAID, you can also go to the HP Smart-Update Manager (HPSUM) web

page to view your contract online and elect electronic delivery for your updates.

Software and Drivers Download Pages
For selection of your country or region for localized technical support information please visit: http://www.hp.com/support Selecting "Servers" provides latest software and drivers for your HP ProLiant products.

Join the Discussion (http://www.itrc.hp.com)
The HP Support Forum is a community-based, user supported tool for HP customers to participate in discussions amongst the customer community about HP products. For discussions related to Insight Control and HP ProLiant Essentials software, see the "Management Software and System Tools" area.

Management Security (http://www.hp.com/servers/manage/security)
HP is proactive in its approach to the quality and security of all its management software. Be sure to check the website often for the latest down-loadable security updates.

Obtain the Latest SmartStart Release (http://www.hp.com/servers/smartstart)
The SmartStart, Management, and Firmware CD/DVD's are now freely available for download following a simple registration from the SmartStart web site. If you wish to receive physical kits with each release you can order single release kits from the SmartStart web site. To receive proactive notification when SmartStart releases are available, subscribe to Subscriber's Choice at: http://www.hp.com/go/subscriberschoice.

HP Worldwide Customer Service contact numbers are available at: http://www.hp.com/country/us/en/wwcontact.html.

Related Options

HP Insight Capacity Advisor Consolidation Software	HP Insight Capacity Advisor Consolidation software for HP ProLiant Flexible-Quantity License NOTE: For additional license kits please see the QuickSpecs at: http://www.hp.com/go/capad	492632-B21
HP Insight Orchestration Software	HP Insight Orchestration software, 1-Server License including 24 x 7 Support NOTE: This license supports HP ProLiant ML/DL servers and c-Class blade servers. Customer will receive a printed license entitlement certificate via physical shipment. NOTE: For additional license kits please see the QuickSpecs at: http://www.hp.com/go/insightorchestration	512277-B21
HP Insight Dynamics - VSE Suite	HP Insight Dynamics-VSE with Insight Control suite, 1-server license including 1 year of 24x7 Technical Support and Updates NOTE: This license supports HP ProLiant ML/DL servers and ProLiant c-Class blade servers. Customer will receive a printed license entitlement certificate via physical shipment. NOTE: For additional license kits please see the QuickSpecs at: http://www.hp.com/go/insightdynamics	483527-B21

Service and Support	NOTE: HP Insight Recovery comes bundled with 1 Year, 24x7 Support & Updates. The following Service Uplifts and additions are also available.	
	HP 3year 24x7 HP Insight Recovery SW Support	UM666E
	HP 4year 24x7 HP Insight Recovery SW Support	UM667E
	HP 5year 24x7 HP Insight Recovery SW Support	UM668E
	HP 3year 24x7 HP Insight Recovery 16 Svr SW Support	UM672E
	HP 4year 24x7 HP Insight Recovery 16 Svr SW Support	UM673E
	HP 5year 24x7 HP Insight Recovery 16 Svr SW Support	UM674E
	HP 3year 24x7 HP Insight Recovery 8 Svr SW Support	UM669E
	HP 4year 24x7 HP Recovery 8 Svr SW Support	UM670E
	HP 5year 24x7 HP Insight Recovery 8 Svr SW Support	UM671E
	HP Insight Recovery Installation & Startup Service	UK830E
	HP Insight Dynamics - VSE Installation & Startup Service	UF819E
	HP Insight Control suite Installation & Startup Service	UF369E
	HP Virtual Connect Enterprise Manager Installation & Startup Service	UF816E
	HP Boot From SAN Installation & Startup Service	UF820E

Hypervisors

- VMware ESX Server
  - VMware ESX Server v3.0.2 or higher, V3.5 U1 or higher, for HP ProLiant ML/DL Servers and BladeSystem with HP ProLiant blades

Managed servers

Managed Servers:

- HP ProLiant DL/ML rackmount and tower server series 300, 500 and 700 (for VMware ESX guest failover environments ONLY)
  - Microsoft Windows Server 2003 R2 Standard SP2
  - Microsoft Windows Server 2003 R2 Standard SP2 (x64) - 32 bit mode
  - Microsoft Windows Server 2003 R2 Enterprise SP2
  - Microsoft Windows Server 2003 R2 Enterprise SP2 (x64) - 32 bit mode
  - Microsoft Windows Server 2003 Standard SP2
  - Microsoft Windows Server 2003 Standard SP2 (x64) - 32 bit mode
  - Microsoft Windows Server 2003 Enterprise SP2
  - Microsoft Windows Server 2003 Enterprise SP2 (x64) - 32 bit mode
  - Microsoft Windows Server 2008 Standard
  - Microsoft Windows Server 2008 Standard (x64) - 32 bit mode
  - Microsoft Windows Server 2008 Enterprise
  - Microsoft Windows Server 2008 Enterprise (x64) - 32 bit mode
  - Red Hat Enterprise Linux 5.1, 5.6 for x86
  - Red Hat Enterprise Linux 5.1, 5.2 for AMD64/EM64T
  - Red Hat Enterprise Linux 4.6, 4.7 for x86
  - Red Hat Enterprise Linux 4.6, 4.7 for AMD64/EM64T
- HP ProLiant c-Class BladeSystems (for blade to blade and VMware ESX guest failover environments)
  - Microsoft Windows Server 2003 R2 Standard SP2
  - Microsoft Windows Server 2003 R2 Standard SP2 (x64) - 32 bit mode
  - Microsoft Windows Server 2003 R2 Enterprise SP2
  - Microsoft Windows Server 2003 R2 Enterprise SP2 (x64) - 32 bit mode
  - Microsoft Windows Server 2003 Standard SP2
  - Microsoft Windows Server 2003 Standard SP2 (x64) - 32 bit mode
  - Microsoft Windows Server 2003 Enterprise SP2
  - Microsoft Windows Server 2003 Enterprise SP2 (x64) - 32 bit mode
  - Microsoft Windows Server 2008 Standard
  - Microsoft Windows Server 2008 Standard (x64) - 32 bit mode
  - Microsoft Windows Server 2008 Enterprise
  - Microsoft Windows Server 2008 Enterprise (x64) - 32 bit mode
  - Red Hat Enterprise Linux 5.1, 5.2 for x86
  - Red Hat Enterprise Linux 5.1 , 5.2 for AMD64/EM64T
  - Red Hat Enterprise Linux 4.6, 4.7 for x86
  - Red Hat Enterprise Linux 4.6, 4.7 for AMD64/EM64T

Central Management Server (CMS) with HP Systems Insight Manager

Windows CMS on HP ProLiant requirements:

- Hardware
  - HP ProLiant DL/ML rack-mount and tower server series 300, 500 and 700, G3 or higher recommended
  - HP ProLiant c-Class BladeSystems
- Operating Systems
  - Microsoft Windows 2003 Standard SP2
  - Microsoft Windows 2003 R2 Standard SP2

- Windows 2003 Enterprise SP2
- Microsoft Windows 2003 R2 Enterprise SP2
- Microsoft Windows Server 2008 Standard
- Microsoft Windows 2008 Enterprise

- Virtualization Platforms
  - ESX Server 3.0.2, or later, and 3.5 Update 1 or later guest running supported Windows operating system

NOTE: For additional requirements on the Windows CMS on HP ProLiant, see the HP Insight Dynamics - VSE QuickSpecs at: http://www.hp.com/go/insightdynamics

Other Hardware and Software Requirements and Options

- HP Insight Dynamics - VSE 4.1 suite for ProLiant
  - HP Insight Software V3.10 Media Kit
- Storage environment (for data replication)
  - HP EVA 4000/4100/4400, 6000/6100/6400, 8000/8100/8400 Storage Arrays
  - HP StorageWorks Continuous Access EVA Software, Synchronous Mode
  - HP Command View EVA server (EVA storage management)
    - Insight Recovery supports versions of Command View EVA as required by each storage array as listed above
- Storage Area Network with boot from SAN capability is required.
  - Any Fibre Channel storage solution which supports the Virtual Connect environment and boot from SAN capability (boot volume as a pre-presented LUN)
    - The recommended FC SAN solutions are HP StorageWorks (XP, EVA, and MSA) Disk Arrays
  - The storage validation feature of logical servers with Insight Dynamics - VSE 4.1 is supported on the following HP StorageWorks Disk Arrays:
    - MSA1000/1500
    - EVA3000/5000/4x00/6x00/8x00

Other product information

The following product materials are available for HP Insight Recovery on HP Insight Dynamics - VSE web page at: http://www.hp.com/go/insightrecovery

General FAQ
QuickSpecs
White Papers
Technical Documentation

HP Insight Dynamics - VSE	For more information on HP Insight Dynamics - VSE, visit: http://www.hp.com/go/insightdynamics
HP Insight Capacity Advisor Consolidation Software	For more information on HP Insight Capacity Advisor Consolidation software, visit: http://www.hp.com/go/capad
HP Insight Orchestration	For more information on HP Insight Orchestration software, visit: http://www.hp/com/go/insightorchestration
Virtual Connect Enterprise Manager	For more information on HP Virtual Connect Enterprise Manager visit: http://www.hp.com/go/vcem
Virtual Connect	For more information on HP Virtual Connect visit: http://www.hp.com/go/bladesystem/virtualconnect
HP Systems Insight Manager	For more information on HP Systems Insight Manager visit: http://www.hp.com/go/hpsim

	HP Insight Control suite	For more information on HP Insight Control visit: http://www.hp.com/go/insightcontrol
	HP Virtual Server Environment suite for Integrity	For more information on the HP Virtual Server Environment Suite for Integrity visit: http://www.hp.com/go/vse
	HP Insight Server Migration software	For more information on the HP Insight Server Migration software for ProLiant servers visit: http://www.hp.com/go/migrate
	HP Virtualization with VMware	For more information on HP Virtualization with VMware visit: http://www.hp.com/go/vmware
Environment-friendly Products and Approach	End-of-life Management and Recycling	Hewlett-Packard offers end-of-life HP product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to: http://www.hp.com/go/green. To recycle your product, please go to: http://www.hp.com/go/green or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner. The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: http://www.hp.com/go/green. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.

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